

PMA 2 INGRESS

TOOLS AND EQUIPMENT REQUIRED

Unstow, place in tool bag:

- APAS Hatch Tool (2)
- Alcohol Pads (for APAS hatch seal)
- Station Portable Fire Extinguisher (CO2 bottle)
- D-Cell BATTs (16)
- Air Sample Bottles (4)
- Desiccant/Shroud Assemblies (4)
- Spotlight
- Towel
- 4-inch Ratchet Wrench, 1/4" Drive
- TBD-inch extension, 1/4" Drive
- 1/4" to 3/8" Adapter, 1/4" Drive
- 7/16" Deepwell Socket, 1/4" Drive
- 5/32" Hex Head Driver, 1/4" Drive
- Universal Joint, 3/8" Drive
- 4-inch Adjustable Wrench
- General Purpose Tape (2")
- Nylon Wire Tie Wraps
- Tie Wrap Cutting Tool
- Connector Pliers
- Short Flat Tip Screw Driver
- Velcro

Unstow:

- Portable Fan Assemblies (4)
- ISS O2 Extension Segments (2)
- FGB Harmful Contaminants Filter Cartridge
- Empty 'Return to Houston' Bag

SETUP QDMS FOR INGRESS CONTINGENCY SUPPORT

1. Retrieve ISS O2 Extension Segments (two).
Disconnect two QDMs from existing O2 lines.
Connect a QDM to one end of each of the ISS O2 Extension Segments.

C7 2. √LEH O2 SPLY 1,2 Vlv (two) - Op

MO32M LEH O2 7,8 Outlet (two) → Connect free end of one QDM/ISS O2
 Extension Segment to each outlet
 LEH O2 7,8 Vlv (two) → Op

3. Route both QDM/ISS O2 Extension Segments to Ext A/L.

SETUP EXTERNAL AIRLOCK FOR ODS AND PMA INGRESS

4. Relocate Tool Bag, shuttle/station Air Duct Assembly, PMA IMV Duct Extension, and Portable Fan Assemblies, 'Return to Houston' Bag to Ext A/L.

5. cb Depress MN A(B) SYS 1(2) Vent → CI
 cb Depress ESS1BC(2CA) SYS 1(2) Vent ISOL → CI
 √VEST DEP VLV SYS 1(2) VENT - CI (tb-CI)
 ISOL → CI (tb-CI)
 cb Depress MN A(B) SYS 1(2) Vent → Op
 cd Depress ESS1BC(2CA) SYS 1(2) Vent ISOL → Op

Expect possible dP/dt klaxon if vestibule requires repressurization.

6. EQUAL VLV (one) → Norm
√ODS Hatch $\Delta P \leq 0.2$ psid

7. Open ODS hatch per decal.
EQUAL VLV (one) → Off
Install cap.

Surfaces may be below freezing for a short time after initial ODS Hatch opening. Avoid direct contact with vestibule surfaces until SHUTTLE VESTIBULE TEMP 1,2 (two) indicate > 40 degF (SM 211 DM STATUS ODS INTERFACE).

8. $\sqrt{\text{MCC-H}}$ 'Go for PMA 2 Ingress'.

9. Select 'ÐÀÁÎ ×ÅÅ' (WORKING) torque setting on APAS Hatch Tool.
Insert tool in hatch socket.
Rotate tool 3-4 turns in direction of 'Î ÒËÐ' (Open) arrow until it clicks.

```
*****
* If tool prematurely slips or does not engage                                *
*   Select 'ÄÄÄÄÄÉÉÍ Î Ä' (EMERGENCY) setting on                          *
*   hatch tool                                                                *
*   Reattempt to open Hatch.                                                 *
*****
```

ISS OPS/3A/PRE B

- EXT
A/L
10. Cut and remove tie-wrap holding air inlet flex duct to halo cross using Tie-Wrap Cutting Tool.
Disconnect air inlet flex duct from halo cross air duct.
Obtain shuttle/station Air Duct Assembly stowed in PMA 2.
Remove handled clamp from shuttle/station Air Duct Assembly.
Install handled clamp over end of air inlet flex duct.
 11. Insert male end of male/female duct adapter on shuttle/station Air Duct Assembly into end of air inlet flex duct.
Tighten clamp using handle until secure.
Secure assembly across the adapter using fabric straps/snaps.
Secure shuttle/station Air Duct Assembly with TBD to TBD.
- PMA 2
12. Remove band clamp and cap from PMA 2 hard duct.
Stow cap on side of hard duct with pre-positioned Velcro.
Connect free end of shuttle/station Air Duct Assembly to PMA 2 hard duct inlet with band clamp.
Secure band clamp with over-center latch.
 13. Remove Velcro strap from PMA 2 hard duct grille assembly (near duct connection just made).
 14. Verify grille cover open.

This Page Intentionally Blank